



Chemical and Environmental Measurement Information

**Recra LabNet Philadelphia
Analytical Report
*** REVISION *****

Client: TNU-HANFORD B99-037
RFW #: 0003L595
SDG/SAF #: H0763/B99-037

W.O. #: 10985-001-001-9999-00
Date Received: 03-01-2000

SEMIVOLATILE

Two (2) water samples were collected on 02-28-2000.

The samples and their associated QC samples were extracted on 03-06-2000,04-14-2000 and analyzed according to criteria set forth in Recra OPs based on SW 846 Method 8270B for Appendix IX Semivolatile target compounds on 03-14,15-2000 and 04-20,27-2000.

The following is a summary of the QC results accompanying the sample results and a description of any problems encountered during their analyses:

1. This Case Narrative has been revised to amend item # 9.
2. The cooler temperatures upon receipt have been recorded on the chain-of-custody.
3. The samples were extracted and analyzed within required holding times; however, samples were re-extracted outside of holding time (see item 9).
4. Non-target compounds were detected in the samples.
5. All surrogate recoveries were within EPA QC limits.
6. One (1) of twenty-two (22) blank spike recoveries was outside EPA QC limits.
7. Two (2) of forty-four (44) matrix spike recoveries were outside EPA QC limits.
8. The method blank contained the common laboratory contaminants Bis(2-Ethylhexyl)phthalate at a level greater than 5x the CRQL and Di-n-butylphthalate at a level less than the CRQL. A copy of the Sample Discrepancy Report (SDR) has been enclosed.
9. A spectral search was performed for the compounds 1-Acetyl-2-thiourea, 2,5-Diaminotoluene and 2-Cyclohexyl-4,6-Dinitrophenol, O,O,O-Triethylphosphorothioate. These compounds were not identified in the samples.
10. Samples were re-extracted outside the holding time to confirm that the level of Bis(2-Ethylhexyl)phthalate reported for the initial analyses was laboratory contamination. The compound Bis(2-Ethylhexyl)phthalate was not detected in the re-extracted sample analyses. The re-extract analyses were only analyzed for TCL compounds. A copy of the Sample Discrepancy Report (SDR) has been enclosed.

RECEIVED
AUG 17 2000

EDMC

for *J. Michael Taylor*
/ J. Michael Taylor

Vice President
Philadelphia Analytical Laboratory

06-01-00
Date

som\group\data\bna\tnu-hanford-03-595.doc

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 2 7 pages.

GLOSSARY OF BNA DATA

DATA QUALIFIERS

- U** = Compound was analyzed for but not detected. The associated numerical value is the estimated sample quantitation limit which is included and corrected for dilution and percent moisture.
- J** = Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; or 2) when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. For example, if the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B** = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination. This flag is also used for a TIC as well as for a positively identified TCL compound.
- E** = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- D** = Identifies all compounds identified in an analysis at a secondary dilution factor.
- I** = Interference.
- NQ** = Result qualitatively confirmed but not able to quantify.
- A** = Indicates that a TIC is a suspected aldol-condensation product.
- N** = Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
- X** = This flag is used for a TIC compound which is quantified relative to a response factor generated from a daily calibration standard (rather than quantified relative to the closest internal standard).
- Y** = Additional qualifiers used as required are explained in the case narrative.



GLOSSARY OF BNA DATA

ABBREVIATIONS

- BS** = Indicates blank spike in which reagent grade water is spiked with the CLP matrix spike solutions and carried through all the steps in the method. Spike recoveries are reported.
- BSD** = Indicates blank spike duplicate.
- MS** = Indicates matrix spike.
- MSD** = Indicates matrix spike duplicate.
- DL** = Suffix added to sample number to indicate that results are from a diluted analysis.
- NA** = Not Applicable.
- DF** = Dilution Factor.
- NR** = Not Required.
- SP, Z** = Indicates Spiked Compound.



Initiator: John W. Smith Batch: 00034595 Parameter: BNA
 Date: 3/20/10 Samples: Whole Batch Matrix: WATER
 Client: TUC-HAWICRI Method: SW846/MCAWW/CLP Prep Batch: 00LE0229
HO 763

1. Reason for SDR

- a. COC Discrepancy Tech Profile Error Client Request Sampler Error on C-O-C
 Transcription Error Wrong Test Code Other _____
- b. General Discrepancy
 Missing Sample/Extract Container Broken Wrong Sample Pulled Label ID's Illegible
 Hold Time Exceeded Insufficient Sample Preservation Wrong Received Past Hold
 Improper Bottle Type Not Amenable to Analysis

Note: Verified by [Log-In] or [Prep Group] (circle)...signature/date: _____

c. QC Problem (Include all relevant specific results; attach data if necessary)

Bis(2-ethylhexyl) phthalate 5x > CRQL in Blank. All samples contain higher amounts.

2. Known or Probable Causes(s)

3. Discussion and Proposed Action

Other Description:

- Re-log
 Entire Batch
 Following Samples: _____
 Re-leach
 Re-extract
 Re-digest
 Revise EDD
 Change Test Code to _____
 Place On/Take Off Hold (circle)

Determine importance of Bis to client
Narrate or RE EXTRACT
02/24/10

Greer Johnson 3/2/10

4. Project Manager Instructions...signature/date:

- Concur with Proposed Action
 Disagree with Proposed Action; See Instruction
 Include in Case Narrative
 Client Contacted:
 Date/Person Joan Kessner 3/2/10
 Add
 Cancel

re-extract

5. Final Action...signature/date:

Other Explanation:

- Verified re-[log][leach][extract][digest][analysis] (circle)
 Included in Case Narrative
 Hard Copy COC Revised re-extract sample
 Electronic COC Revised analyses yielded no
 EDD Corrections Completed his (BET) phthalate
03/20/10

Batch # 00LE0406

When Final Action has been recorded, forward original to QA Specialist for distribution and filing.

Route	Distribution of Completed SDR	Route	Distribution of Completed SDR
<input checked="" type="checkbox"/>	X Initiator	<input type="checkbox"/>	Metals: Doughty
<input checked="" type="checkbox"/>	X Lab Manager: M. Taylor	<input type="checkbox"/>	Inorganic: Perrone
<input checked="" type="checkbox"/>	X Project Mgr: Stone/Carey/Schrenkel/Johnson	<input type="checkbox"/>	GC/LC: Pastor
<input type="checkbox"/>	X Section Mgr: Wesson/Daniels	<input type="checkbox"/>	MS: Durke/Rycklak
<input type="checkbox"/>	X QA (file): Racioppi	<input type="checkbox"/>	Log-in: Keppel
<input type="checkbox"/>	Data Management: Feldman	<input type="checkbox"/>	Admin: Spas
<input type="checkbox"/>	Sample Prep: Doughty/Kauffman	<input checked="" type="checkbox"/>	Other: <u>BNA</u>

Sample Information	RFW#:	Matrix:	D.F.:	Units:	001	001	001 MS	001 MSD	002	002
					WATER	WATER	WATER	WATER	WATER	WATER
					ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Surrogate Recovery	RFW#:	Matrix:	D.F.:	Units:	001	001	001 MS	001 MSD	002	002
					WATER	WATER	WATER	WATER	WATER	WATER
					ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Nitrobenzene-d5	61	%	68	%	61	%	52	%	66	%
2-Fluorobiphenyl	59	%	60	%	65	%	60	%	64	%
p-Terphenyl-d14	66	%	72	%	79	%	69	%	76	%
Phenol-d5	41	%	68	%	54	%	44	%	58	%
2-Fluorophenol	27	%	63	%	40	%	52	%	59	%
2,4,6-Tribromophenol	24	%	64	%	47	%	62	%	53	%
Phenol	10	U	10	U	51	%	50	%	11	U
bis(2-Chloroethyl) ether	10	U	10	U	20	U	24	U	11	U
2-Chlorophenol	10	U	10	U	52	%	51	%	11	U
1,3-Dichlorobenzene	10	U	10	U	20	U	24	U	11	U
1,4-Dichlorobenzene	10	U	10	U	49	%	41	%	11	U
Benzyl alcohol	10	U	10	U	20	U	24	U	11	U
1,2-Dichlorobenzene	10	U	10	U	20	U	24	U	11	U
2-Methylphenol	10	U	10	U	20	U	24	U	11	U
bis(2-Chloroisopropyl) ether	10	U	10	U	20	U	24	U	11	U
4-Methylphenol	10	U	10	U	20	U	24	U	11	U
N-Nitroso-Di-n-propylamine	10	U	10	U	83	%	62	%	11	U
Hexachloroethane	10	U	10	U	20	U	24	U	11	U
Nitrobenzene	10	U	10	U	20	U	24	U	11	U
Isophorone	10	U	10	U	20	U	24	U	11	U
2-Nitrophenol	10	U	10	U	20	U	24	U	11	U
2,4-Dimethylphenol	10	U	10	U	20	U	24	U	11	U
Benzoic acid	26	U	26	U	50	U	60	U	27	U
bis(2-Chloroethoxy) methane	10	U	10	U	20	U	24	U	11	U
2,4-Dichlorophenol	10	U	10	U	20	U	24	U	11	U
1,2,4-Trichlorobenzene	10	U	10	U	56	%	48	%	11	U
Naphthalene	10	U	10	U	20	U	24	U	11	U
4-Chloroaniline	10	U	10	U	20	U	24	U	11	U
Hexachlorobutadiene	10	U	10	U	20	U	24	U	11	U
4-Chloro-3-methylphenol	10	U	10	U	39	%	52	%	11	U
2-Methylnaphthalene	10	U	10	U	20	U	24	U	11	U
Hexachlorocyclopentadiene	10	U	10	U	20	U	24	U	11	U

* = Outside of EPA CLP QC limits.

Cust ID: B0XP36 B0XP36 B0XP36 B0XP36 B0XP37 B0XP37
 RFW#: 001 001 001 MS 001 MSD 002 REPRREP

Chemical Name	001	001	001 MS	001 MSD	002	002
2,4,6-Trichlorophenol	10 U	10 U	20 U	24 U	11 U	10 U
2,4,5-Trichlorophenol	26 U	26 U	50 U	60 U	27 U	26 U
2-Chloronaphthalene	10 U	10 U	20 U	24 U	11 U	10 U
2-Nitroaniline	26 U	26 U	50 U	60 U	27 U	26 U
Dimethylphthalate	10 U	10 U	20 U	24 U	11 U	10 U
Acenaphthylene	10 U	10 U	20 U	24 U	11 U	10 U
2,6-Dinitrotoluene	10 U	10 U	20 U	24 U	11 U	10 U
3-Nitroaniline	26 U	26 U	50 U	60 U	27 U	26 U
Acenaphthene	10 U	10 U	20 U	24 U	11 U	10 U
2,4-Dinitrophenol	26 U	26 U	50 U	60 U	27 U	26 U
4-Nitrophenol	26 U	26 U	69 %	47 %	27 U	26 U
Dibenzofuran	10 U	10 U	20 U	24 U	11 U	10 U
2,4-Dinitrotoluene	10 U	10 U	77 %	58 %	11 U	10 U
Diethylphthalate	10 U	10 U	1 J	24 U	11 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	20 U	24 U	11 U	10 U
Fluorene	10 U	10 U	20 U	24 U	11 U	10 U
4-Nitroaniline	26 U	26 U	50 U	60 U	27 U	26 U
4,6-Dinitro-2-methylphenol	26 U	26 U	50 U	60 U	27 U	26 U
N-Nitrosodiphenylamine (1)	10 U	10 U	20 U	24 U	11 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	20 U	24 U	11 U	10 U
Hexachlorobenzene	10 U	10 U	20 U	24 U	11 U	10 U
Pentachlorophenol	26 U	26 U	76 %	70 %	27 U	26 U
Phenanthrene	10 U	10 U	20 U	24 U	11 U	10 U
Anthracene	10 U	10 U	20 U	24 U	11 U	10 U
Di-n-Butylphthalate	2 JB	0.6 J	4 JB	3 JB	2 JB	10 U
Fluoranthene	10 U	10 U	20 U	24 U	11 U	10 U
Pyrene	10 U	10 U	80 %	69 %	11 U	10 U
Butylbenzylphthalate	10 U	10 U	20 U	24 U	11 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	20 U	24 U	11 U	10 U
Benzo(a)anthracene	10 U	10 U	20 U	24 U	11 U	10 U
Chrysene	10 U	10 U	20 U	24 U	11 U	10 U
bis(2-Ethylhexyl)phthalate	310 E	10 U	960 E	500 E	200 E	10 U
Di-n-Octyl phthalate	10 U	10 U	20 U	24 U	11 U	10 U
Benzo(b)fluoranthene	10 U	10 U	20 U	24 U	11 U	10 U
Benzo(k)fluoranthene	10 U	10 U	20 U	24 U	11 U	10 U
Benzo(a)pyrene	10 U	10 U	20 U	24 U	11 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	20 U	24 U	11 U	10 U
Dibenzo(a,h)anthracene	10 U	10 U	20 U	24 U	11 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	20 U	24 U	11 U	10 U
1,4-Dioxane	10 U	10 U	20 U	5 J	11 U	10 U

* = Outside of EPA CLP QC limits.

RFW#	001	001	001 MS	001 MSD	002	002				
REPREP	REPREP	REPREP	REPREP	REPREP	REPREP	REPREP				
Methyl methacrylate	10	U	20	U	24	U	11	U	10	U
Pyridine	10	U	20	U	24	U	11	U	10	U
N-Nitrosodimethylamine	10	U	20	U	24	U	11	U	10	U
Ethyl methacrylate	10	U	20	U	24	U	11	U	10	U
2-Picoline	10	U	20	U	24	U	11	U	10	U
N-Nitrosomethylethylamine	10	U	20	U	24	U	11	U	10	U
Methyl methanesulfonate	10	U	20	U	24	U	11	U	10	U
N-Nitrosodiethylamine	10	U	20	U	24	U	11	U	10	U
Ethyl methanesulfonate	10	U	20	U	24	U	11	U	10	U
Aniline	10	U	20	U	24	U	11	U	10	U
Pentachloroethane	10	U	20	U	24	U	11	U	10	U
3-Methylphenol	10	U	20	U	24	U	11	U	10	U
N-Nitrosopyrrolidine	10	U	20	U	24	U	11	U	10	U
Acetophenone	10	U	20	U	24	U	11	U	10	U
N-Nitrosomorpholine	10	U	20	U	24	U	11	U	10	U
o-Toluidine	10	U	20	U	24	U	11	U	10	U
N-Nitrosopiperidine	51	U	100	U	120	U	53	U	51	U
a,a-Dimethylphenethylamine	10	U	20	U	24	U	11	U	10	U
2,6-Dichlorophenol	10	U	20	U	24	U	11	U	10	U
Hexachloropropene	10	U	20	U	24	U	11	U	10	U
p-Phenylenediamine	10	U	20	U	24	U	11	U	10	U
N-Nitroso-di-n-butylamine	10	U	20	U	24	U	11	U	10	U
Safrole	10	U	20	U	24	U	11	U	10	U
1,2,4,5-Tetrachlorobenzene	10	U	20	U	24	U	11	U	10	U
Isosafrole	10	U	20	U	24	U	11	U	10	U
1,4-Naphthoquinone	10	U	20	U	24	U	11	U	10	U
1,3-Dinitrobenzene	10	U	20	U	24	U	11	U	10	U
Pentachlorobenzene	10	U	20	U	24	U	11	U	10	U
1-Naphthylamine	10	U	20	U	24	U	11	U	10	U
2-Naphthylamine	10	U	20	U	24	U	11	U	10	U
2,3,4,6-Tetrachlorophenol	10	U	20	U	24	U	11	U	10	U
1,3,5-Trinitrobenzene	10	U	20	U	24	U	11	U	10	U
Diallylate	10	U	20	U	24	U	11	U	10	U
Phenacetin	10	U	20	U	24	U	11	U	10	U
Diphenylamine	10	U	20	U	24	U	11	U	10	U
5-Nitro-o-toluidine	10	U	20	U	24	U	11	U	10	U
4-Aminobiphenyl	10	U	20	U	24	U	11	U	10	U
Pronamide	10	U	20	U	24	U	11	U	10	U
2-sec-Butyl-4,6-dinitrophenol	51	U	100	U	120	U	53	U	51	U
Pentachloronitrobenzene	51	U	100	U	120	U	53	U	51	U

* = Outside of EPA CLP QC limits.

Cust ID: B0XP36 B0XP36 B0XP36 B0XP36 B0XP37 B0XP37

RFW#: 001 001 001 MS 001 MSD 002 002

	REPREP	REPREP	REPREP	REPREP	REPREP	REPREP
4-Nitroquinoline-1-oxide	20 U	20 U	40 U	48 U	21 U	20 U
Methapyrilene	10 U	10 U	20 U	24 U	11 U	10 U
Aramite	20 U	20 U	40 U	48 U	21 U	20 U
Chlorobenzilate	10 U	10 U	20 U	24 U	11 U	10 U
p-Dimethylaminoazobenzene	10 U	10 U	20 U	24 U	11 U	10 U
3,3'-Dimethylbenzidine	10 U	10 U	20 U	24 U	11 U	10 U
2-Acetylaminofluorene	10 U	10 U	20 U	24 U	11 U	10 U
7,12-Dimethylbenz(a)anthracene	10 U	10 U	20 U	24 U	11 U	10 U
Hexachlorophene	100 U	100 U	200 U	240 U	110 U	100 U
3-Methylcholanthrene	10 U	10 U	20 U	24 U	11 U	10 U
1,2-Diphenylhydrazine	10 U	10 U	20 U	24 U	11 U	10 U
1,4-Dinitrobenzene	10 U	10 U	20 U	24 U	11 U	10 U

(1) - Cannot be separated from Diphenylamine. * = Outside of EPA CLP QC Limits.

Reetra LabNet - Lionville Laboratory
SemiVolatiles by GC/MS, Appendix IX List

RFW Batch Number: 00031L595

Client: TNTJ-HANFORD B99-037

Work Order: 10985001001

Report Date: 05/01/00 16:04
Page: 2a

Sample Information	RFW#:	002 MS	002 MSD	001E0229-ME1	001E0229-ME1	001E0406-ME1	001E0406-ME1
Matrix:		WATER	WATER	WATER	WATER	WATER	WATER
D.F.:		1.00	1.00	1.00	1.00	1.00	1.00
Units:		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Surrogate	Recovery	2,4,6-Tribromophenol	Phenol	bis(2-Chloroethyl) ether	2-Chlorophenol	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Benzyl alcohol	1,2-Dichlorobenzene	2-Methylphenol	bis(2-Chloroisopropyl) ether	4-Methylphenol	N-Nitroso-Di-n-propylamine	Hexachloroethane	Nitrobenzene	Isophorone	2-Nitrophenol	2,4-Dimethylphenol	Benzoic acid	bis(2-Chloroethoxy) methane	2,4-Dichlorophenol	1,2,4-Trichlorobenzene	Naphthalene	4-Chloroaniline	Hexachlorobutadiene	4-Chloro-3-methylphenol	2-Methylnaphthalene	Hexachlorocyclopentadiene		
		59	45	22	36	22	22	22	22	22	22	22	61	22	22	22	22	22	56	22	22	38	22	22	22	22	58	22	22	
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
		69	63	20	62	20	20	20	20	20	20	20	76	20	20	20	20	20	49	20	20	56	20	20	20	20	20	20	20	
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
		18	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	25	10	10	10	10	10	10	10	10	10	10	
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
		52	48	10	46	10	10	10	10	10	10	10	69	10	10	10	10	10	25	10	10	51	10	10	10	10	10	10	10	
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
		64	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	25	10	10	10	10	10	10	10	10	10	10	
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
		82	56	10	58	10	10	10	10	10	10	10	90	10	10	10	10	10	25	10	10	48	10	10	10	10	10	10	10	
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%

*= Outside of EPA CLP QC limits.

Cust ID: B0XP37 B0XP37 SBLKML SBLKML BS SBLKPB SBLKPB BS

RFW#: 002 MS 002 MSD 001E0229-MB1 001E0229-MB1 001E0406-MB1 001E0406-MB1

Chemical Name	REP											
2,4,6-Trichlorophenol	22	U	20	U	10	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	56	U	49	U	25	U	25	U	25	U	25	U
2-Chloronaphthalene	22	U	20	U	10	U	10	U	10	U	10	U
2-Nitroaniline	56	U	49	U	25	U	25	U	25	U	25	U
Dimethylphthalate	22	U	20	U	10	U	10	U	10	U	10	U
Acenaphthylene	22	U	20	U	10	U	10	U	10	U	10	U
2,6-Dinitrotoluene	22	U	20	U	10	U	10	U	10	U	10	U
3-Nitroaniline	56	U	49	U	25	U	25	U	25	U	25	U
Acenaphthene	56	U	61	U	10	U	72	U	10	U	61	U
2,4-Dinitrophenol	56	U	49	U	25	U	25	U	25	U	25	U
4-Nitrophenol	50	U	58	U	25	U	75	U	25	U	83	U
Dibenzofuran	22	U	20	U	10	U	10	U	10	U	10	U
2,4-Dinitrotoluene	71	U	76	U	10	U	77	U	10	U	77	U
Diethylphthalate	22	U	20	U	10	U	10	U	10	U	10	U
4-Chlorophenyl-phenylether	22	U	20	U	10	U	10	U	10	U	10	U
Fluorene	22	U	20	U	10	U	10	U	10	U	10	U
4-Nitroaniline	56	U	49	U	25	U	25	U	25	U	25	U
4,6-Dinitro-2-methylphenol	56	U	49	U	25	U	25	U	25	U	25	U
N-Nitrosodiphenylamine (1)	22	U	20	U	10	U	10	U	10	U	10	U
4-Bromophenyl-phenylether	22	U	20	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	22	U	20	U	10	U	10	U	10	U	10	U
pentachlorophenol	53	U	73	U	25	U	77	U	25	U	35	U
phenanthrene	22	U	20	U	10	U	10	U	10	U	10	U
Anthracene	22	U	20	U	10	U	10	U	10	U	10	U
Di-n-Butylphthalate	22	U	1	J	2	J	2	JB	2	J	0.6	JB
Fluoranthene	22	U	20	U	10	U	10	U	10	U	10	U
Pyrene	66	U	70	U	10	U	84	U	10	U	68	U
Butylbenzylphthalate	22	U	20	U	10	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	22	U	20	U	10	U	10	U	10	U	10	U
Benzo(a)anthracene	22	U	20	U	10	U	10	U	10	U	10	U
Chrysene	22	U	20	U	10	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	22	U	20	U	85	E	140	E	3	J	1	JB
Di-n-Octyl phthalate	22	U	20	U	10	U	10	U	10	U	10	U
Benzo(b)fluoranthene	22	U	20	U	10	U	10	U	10	U	10	U
Benzo(k)fluoranthene	22	U	20	U	10	U	10	U	10	U	10	U
Benzo(a)pyrene	22	U	20	U	10	U	10	U	10	U	10	U
Indeno(1,2,3-cd)pyrene	22	U	20	U	10	U	10	U	10	U	10	U
Dibenzo(a,h)anthracene	22	U	20	U	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	22	U	20	U	10	U	10	U	10	U	10	U
1,4-Dioxane	22	U	20	U	10	U	10	U	10	U	10	U

* = Outside of EPA CLP QC limits.

Cust ID: B0XP37 B0XP37 SBLKML SBLKML BS SBLKPB SBLKPB BS

RFW#: 002 MS 002 MSD 001E0229-MB1 001E0229-MB1 001E0406-MB1 001E0406-MB1

	REPREP	REPREP								
Methyl methacrylate	22	U	20	U	10	U	10	U	10	U
Pyridine	22	U	20	U	10	U	10	U	10	U
N-Nitrosodimethylamine	22	U	20	U	10	U	10	U	10	U
Ethyl methacrylate	22	U	20	U	10	U	10	U	10	U
2-Picoline	22	U	20	U	10	U	10	U	10	U
N-Nitrosomethylethylamine	22	U	20	U	10	U	10	U	10	U
Methyl methanesulfonate	22	U	20	U	10	U	10	U	10	U
N-Nitrosodiethylamine	22	U	20	U	10	U	10	U	10	U
Ethyl methanesulfonate	22	U	20	U	10	U	10	U	10	U
Aniline	22	U	20	U	10	U	10	U	10	U
Pentachloroethane	22	U	20	U	10	U	10	U	10	U
3-Methylphenol	22	U	20	U	10	U	10	U	10	U
N-Nitrosopyrrolidine	22	U	20	U	10	U	10	U	10	U
Acetophenone	22	U	20	U	10	U	10	U	10	U
N-Nitrosomorpholine	22	U	20	U	10	U	10	U	10	U
O-Toluidine	22	U	20	U	10	U	10	U	10	U
N-Nitrosopiperidine	110	U	98	U	50	U	50	U	50	U
a,a-Dimethylphenethylamine	22	U	20	U	10	U	10	U	10	U
2,6-Dichlorophenol	22	U	20	U	10	U	10	U	10	U
Hexachloropropene	22	U	20	U	10	U	10	U	10	U
p-Phenylenediamine	22	U	20	U	10	U	10	U	10	U
N-Nitroso-di-n-butylamine	22	U	20	U	10	U	10	U	10	U
Safrole	22	U	20	U	10	U	10	U	10	U
1,2,4,5-Tetrachlorobenzene	22	U	20	U	10	U	10	U	10	U
Isosafrole	22	U	20	U	10	U	10	U	10	U
1,4-Naphthoquinone	22	U	20	U	10	U	10	U	10	U
1,3-Dinitrobenzene	22	U	20	U	10	U	10	U	10	U
Pentachlorobenzene	22	U	20	U	10	U	10	U	10	U
1-Naphthylamine	22	U	20	U	10	U	10	U	10	U
2-Naphthylamine	22	U	20	U	10	U	10	U	10	U
2,3,4,6-Tetrachlorophenol	22	U	20	U	10	U	10	U	10	U
1,3,5-Trinitrobenzene	22	U	20	U	10	U	10	U	10	U
Diallate	22	U	20	U	10	U	10	U	10	U
Phenacetin	22	U	20	U	10	U	10	U	10	U
Diphenylamine	22	U	20	U	10	U	10	U	10	U
5-Nitro-o-toluidine	22	U	20	U	10	U	10	U	10	U
4-Aminobiphenyl	22	U	20	U	10	U	10	U	10	U
Pronamide	22	U	20	U	10	U	10	U	10	U
2-sec-Butyl-4,6-dinitrophenol	110	U	98	U	50	U	50	U	50	U
Pentachloronitrobenzene	110	U	98	U	50	U	50	U	50	U

* = Outside of EPA CLP QC limits.

Cust ID: B0XP37 B0XP37 SBLKML SBLKML BS SBLKPB SBLKPB BS

RFW#: 002 MS 002 MSD 001E0229-MB1 001E0229-MB1 001E0406-MB1 001E0406-MB1

	REPREP	REPREP								
4-Nitroquinoline-1-oxide	44 U	39 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Methapyrilene	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Aramite	44 U	39 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Chlorobenzilate	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
p-Dimethylaminoazobenzene	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dimethylbenzidine	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Acetylaminofluorene	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
7,12-Dimethylbenz(a)anthracene	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorophene	220 U	200 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
3-Methylcholanthrene	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Diphenylhydrazine	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dinitrobenzene	22 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

(1) - Cannot be separated from Diphenylamine. * = Outside of EPA CLP QC limits.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0XP36

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-037

Matrix: (soil/water) WATER Lab Sample ID: 0003L595-001

Sample wt/vol: 980 (g/mL) ML Lab File ID: A031416

Level: (low/med) LOW Date Received: 03/01/00

% Moisture: decanted: (Y/N) Date Extracted: 03/06/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.85	7	JB
2.	UNKNOWN	11.32	4	JB
3.	UNKNOWN	17.44	2	J
4. 314-40-9	BROMACIL	21.02	20	JN

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0XP36RE

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-037

Matrix: (soil/water) WATER Lab Sample ID: 0003L595-001

Sample wt/vol: 980 (g/mL) ML Lab File ID: D042707

Level: (low/med) LOW Date Received: 03/01/00

% Moisture: decanted: (Y/N) Date Extracted: 04/14/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/27/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.56	3	J
2.	UNKNOWN	9.41	3	J
3.	UNKNOWN	18.22	3	J
4. 314-40-9	BROMACIL	21.56	20	JN

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOXP37

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-037

Matrix: (soil/water) WATER Lab Sample ID: 0003L595-002

Sample wt/vol: 940 (g/mL) ML Lab File ID: A031506

Level: (low/med) LOW Date Received: 03/01/00

% Moisture: decanted: (Y/N) Date Extracted: 03/06/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 5

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.28	30	J
2.	UNKNOWN	8.65	2	J
3.	UNKNOWN	8.85	3	JB
4.	UNKNOWN	17.44	2	J
5. 314-40-9	BROMACIL	21.02	20	JN

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOXP37RE

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-037

Matrix: (soil/water) WATER

Lab Sample ID: 0003L595-002

Sample wt/vol: 980 (g/mL) ML

Lab File ID: D042706

Level: (low/med) LOW

Date Received: 03/01/00

% Moisture: decanted: (Y/N)

Date Extracted: 04/14/00

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 04/27/00

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 4 .:

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.56	2	J
2.	UNKNOWN	9.40	3	J
3.	UNKNOWN	18.21	3	J
4. 314-40-9	BROMACIL	21.56	20	JN

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SBLKML

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-037

Matrix: (soil/water) WATER Lab Sample ID: 00LE0229-MB1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A031412

Level: (low/med) LOW Date Received: 03/06/00

% Moisture: decanted: (Y/N) Date Extracted: 03/06/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/14/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.85	5	J
2.	UNKNOWN	11.3	4	J

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SBLKPB

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-037

Matrix: (soil/water) WATER Lab Sample ID: 00LE0406-MB1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A042009

Level: (low/med) LOW Date Received: 04/14/00

% Moisture: decanted: (Y/N) Date Extracted: 04/14/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/20/00

Injection Volume: 2.0 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 126-73-8	TRIBUTYL PHOSPHATE	17.72	5	JN

Recra LabNet - Lionville Laboratory
 BNA ANALYTICAL DATA PACKAGE FOR
 TNU-HANFORD B99-037

DATE RECEIVED: 03/01/00

RFW LOT # :0003L595

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOXP36	001	W	00LE0229	02/28/00	03/06/00	03/15/00
BOXP36	001	R1	W 00LE0406	02/28/00	04/14/00	04/27/00
BOXP36	001 MS	W	00LE0229	02/28/00	03/06/00	03/15/00
BOXP36	001 MSD	W	00LE0229	02/28/00	03/06/00	03/15/00
BOXP37	002	W	00LE0229	02/28/00	03/06/00	03/15/00
BOXP37	002	R1	W 00LE0406	02/28/00	04/14/00	04/27/00
BOXP37	002 MS	R1	W 00LE0406	02/28/00	04/14/00	04/27/00
BOXP37	002 MSD	R1	W 00LE0406	02/28/00	04/14/00	04/27/00

LAB QC:

∴

SBLKML	MB1	W	00LE0229	N/A	03/06/00	03/14/00
SBLKML	MB1 BS	W	00LE0229	N/A	03/06/00	03/15/00
SBLKPB	MB1	W	00LE0406	N/A	04/14/00	04/20/00
SBLKPB	MB1 BS	W	00LE0406	N/A	04/14/00	04/20/00

Bechtel Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

B99-037-07 Page 2 of 2

Collector: Nielson/Fahlberg
 Project Designation: ERDF Leachate Delisting Analysis

Company Contact: F. Roeck
 Telephone No.: 372-9086
 Sampling Location: ERDF

Project Coordinator: WEISS, RL
 SAF No.: B99-037

Price Code: NA
 Air Quality:

Data Turnaround: 45 Days

Chest No.: ER296019
 Shipped To: RAE
 RMAARECRA 2.28.00

Field Logbook No.: EL 1424
 Offsite Property No.: A000017

COA Ref: 05-004
 Method of Shipment: Fed EX

Bill of Lading/Air Bill No.: 2357953
 417D

POSSIBLE SAMPLE HAZARDS/REMARKS

Preservation	Type of Container	No. of Container(s)	Volume	See Item (1) in Special Instructions	Surfactant - 9030	See Item (2) in Special Instructions	Total Cyanide - 9010	See Item (3) in Special Instructions	Chloro-Herbicides - EPA151	Pesticides - 8081	See Item (4) in Special Instructions	oil & Grease - 9070	Gross Alpha, Gross Beta
HNO3 to pH <2	P	1	500mL	X								HCL to pH <2 Cool 4C	HNO3 to pH <2
ZnAc+NaOH to pH >9 Cool	P	1	500mL	X									P
HNO3 to pH <2	P	1	1000mL	X									
NaOH to pH >12 Cool 4C	P	1	1000mL	X									
Cool 4C	aG	2	1000mL	X									
Cool 4C	aG	2	1000mL	X									
Cool 4C	aG	2	1000mL	X									
Cool 4C	aG	2	1000mL	X									

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time										
30XP36	Water	2.28.00	1015	X									
30XP37	Water	2.28.00	1015	X									

CHAIN OF POSSESSION

Signature/Print Name	Date/Time	Received By	Date/Time	Title
Received By: R. T. ...	14:00	Received By: R. T. ...	2:28:00	
Received By: ...	2:28:00	Received By: ...	3:10:00	
Received By: ...	3:10:00	Received By: ...	3:10:00	

SPECIAL INSTRUCTIONS

- (1) ICP Metals - 6010A (TAL); ICP Metals - 6010A (Add-on) (Arsenic, Lead, Selenium, Silicon, Thallium, Tin)
 - (2) Gamma Spectroscopy (Water) (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155)
 - (3) 8310. SVOA, HPLC (Benzofluoranthrene, Benzofluoranthrene, Dibenzo(a,h)anthracene)
 - (4) Semi-VOA - 8270A (App IX); Semi-VOA - 8270A (App IX Add-On) (1,2-Diphenylhydrazine, 1,4-Dinitrobenzene, 1-Acetyl-2-nitrobenzene, 2-Cyctohexyl-4,6-dinitrophenol)
- Tie to activity report # B0V926

LABORATORY SECTION

RECEIVED BY: _____ DATE/TIME: _____

DISPOSAL METHOD: _____

HI-EE-011 (10/99)

Temp 3.7

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

B99-037-07

Page 1 of 3

Director
Nelson/Fahberg

Company Contact
F Roach
Telephone No.
312-9086

Project Coordinator
WEISS, RL

Price Code

Date Turnaround

Object Designation
ERDF Leachate Delisting Analysis

Sampling Location
ERDF

SAF No.
B99-037

Air Quality

45 Days

Chain No.

ERL 96-09

Field Logbook No.
EL 1424

COA REF ID: 2270
IRDEAL444

Method of Shipment
Fed EX

Shipped To
TMM/RECR

Official Property No.

A00017

Bill of Lading/Air Bill No.

2357953

4170

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	Preservation	None	None	Cool 4C	HNO3 to pH <2	Cool 4C	H2SO4 to pH <2 Cool 4C				
DXP36	Water	2-28-00	1015	P										
W937	Water	3-12-00	b15	P										

CHAIN OF POSSESSION

Signer/Print Names

SPECIAL INSTRUCTIONS

Requested By	Date/Time	Received By	Date/Time	Requested By	Date/Time	Requested By	Date/Time
Requested By: R. Roach	2-28-00	Received By: R. Roach	2-28-00	Requested By: R. Roach	2-28-00	Received By: R. Roach	2-28-00
Requested By: R. Roach	3-1-00	Received By: R. Roach	3-1-00	Requested By: R. Roach	3-1-00	Received By: R. Roach	3-1-00

(1) IC Anions - 9056 (Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate)
Tit to activity report # BOV926

Requested By	Date/Time	Received By	Date/Time	Requested By	Date/Time	Requested By	Date/Time
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LABORATORY SECTION	Received By	Date/Time	LABORATORY SECTION	Received By	Date/Time
LABORATORY SECTION	Received By	Date/Time	LABORATORY SECTION	Received By	Date/Time

Collector: Nielson/Fahlberg
 Project Designation: ERDF: Leachate Delisting Analysis
 Company Contact: F Roock
 Telephone No.: 372-9086
 Project Coordinator: WEISS, RL
 Price Code: 45 Days

Field Logbook No.: EL 1424
 Sampling Location: ERDF
 SAF No.: B99-037
 Method of Shipment: Fed EX
 Air Quality: 45 Days

Shipped To: *REC 2-28-00*
 Offsite Property No.: *A0000117*
 Bill of Lading/Air Bill No.: *423579534110*

POSSIBLE SAMPLE HAZARDS/REMARKS

Preservation	Cool 4C	HCl Cool 4C
Type of Container	3	3
No. of Container(s)	3	3
Volume	40mL	40mL

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	See item (1) in Special Instructions	See item (2) in Special Instructions
10XP36	Water	2-25-00	1015	X	X
10K97	Water	2-28-00	1015	X	A

CHAIN OF POSSESSION

Relinquished By	Date/Time	Received By	Date/Time	Sign/Print Names	Date/Time	Date/Time
<i>R. Johnson</i>	<i>2-28-00</i>	<i>R. Johnson</i>	<i>2-28-00</i>	<i>R. Johnson</i>	<i>2-28-00</i>	<i>1015</i>
<i>Fell</i>	<i>3-1-00</i>	<i>Fell</i>	<i>3-1-00</i>	<i>Fell</i>	<i>3-1-00</i>	<i>1030</i>

SPECIAL INSTRUCTIONS

(1) Alcohols, Glycols, & Ketones - 8013M (1-Butanol, Diethyl ether, Methanol) 08015
 (2) VOA - 8260A (App IX); VOA - 8260A (App IX Add-On) (1,1,2-Trichloro-1,2,2-trifluoroethane, 1,3-Butadiene, 1-Butanol, 2-Chloroethyl vinyl ether, Allyl alcohol, cis-1,2-Dichloroethylene, Crotonaldehyde, Dichloropropanol, Diethyl ether, Ethyl acetate, Isopropanol)
Tie to activity report # B0V926

LABORATORY SECTION: Received By: _____ Date/Time: _____
 Disposal Method: _____

Bechtel Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

B99-037-07 Page 1 of 3

Collector
Nielsen/Fahlberg

Company Contact
F Roeck

Telephone No.
372-9086

Project Coordinator
WEISS, RL

Price Code
WA

Data Turnaround
45 Days

Project Designation
ERDF Leachate Delisting Analysis

Sampling Location
ERDF

Field Logbook No.
EL 1424

Method of Shipment
Fed EX

Air Quality

Field No.
EP 299.021

Offsite Property No.
AD060117

COA REFERENCE
IRDEACH13

Bill of Lading/Air Bill No.
42357953 4181

Shipped To
THH/RECRA

Date
2.28.00

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

SAMPLE ANALYSIS

Sample No.	Matrix	Sample Date	Sample Time	Preservation	Type of Container	No. of Container(s)	Volume	Activity Scan	pH (Water) - 9040	Mercury - 7470 - (CV)	Conductivity - 9050	See Item (1) in Special Instructions	TDS - 160.1	TSS - 160.2	Ammonia - 330.3	Special Instructions	
																IC Anions - 9056 (Bromide, Chloride, Fluoride, Nitrate, Nitric, Phosphate, Sulfate)	Tric to activity report # BOV926
Box 90	Water	2-28-00	1015	None	P	1	20mL	123mL	X	X	X	X	X	X	X	X	SE - Sediment
Box P37	Water	2-28-00	1015	None	P	1	20mL	123mL	X	X	X	X	X	X	X	X	SO - Solid

CHAIN OF POSSESSION

Sign/Print Names

SPECIAL INSTRUCTIONS

Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Roeck	2-28-00	R. Niemi	2-28-00	Roeck	3-1-00	R. Niemi	3-1-00				
R. Niemi	3-1-00	R. Niemi	3-1-00								

LABORATORY SECTION

Received By

Disposal Method

Title

Disposed By

Date/Time

Bechtel Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

B99-037-07

Page 2 of 3

Collector: Nielson/Fahlberg
 Project Designation: ERDF Leachate Delisting Analysis

Company Contact: F Roock
 Telephone No.: 372-9086

Project Coordinator: WEISS, RL
 SAF No.: B99-037

Price Code
 Air Quality
 Data Turnaround: 45 Days

Ice Chest No.: EPA 99-021

Field Logbook No.: EL 1424

COA Method of Shipment: ERDF/Leachate

Method of Shipment: Fed EX

Shipped To: FMA/R/E/CRA 2.2.8.00

Offsite Property No.: A0000117

Bill of Lading/Air Bill No.: 42357953 4181

POSSIBLE SAMPLE HAZARDS/REMARKS

Preservation	Type of Container	No. of Container(s)	Volume	HN03 to pH <2	ZnAc+NaOH to pH >9 Cool	HN03 to pH <2	NaOH to pH >= 12 Cool 4C	HCL to pH <2 Cool 4C	HN03 to pH <2				
				P	P	P	P	gG	gG	gG	gG	P	
		1	500mL										
		1	500mL										
		1	1000mL										
		1	1000mL										
		2	1000mL										
		2	1000mL										
		2	1000mL										
		2	1000mL										
		2	1000mL										

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	HN03 to pH <2	ZnAc+NaOH to pH >9 Cool	HN03 to pH <2	NaOH to pH >= 12 Cool 4C	HCL to pH <2 Cool 4C	HN03 to pH <2				
BOXP36	Water	2.28.00	1015	X	X	X	X	X	X	X	X	X	X
BOXP37	Water	2.28.00	1015	X	X	X	X	X	X	X	X	X	X

SPECIAL INSTRUCTIONS

- (1) ICP Metals - 6010A (TAL); ICP Metals - 6010A (Add-on) (Arsenic, Lead, Selenium, Silicon, Thallium, Tin)
 - (2) Gamma Spectroscopy (Water) (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155)
 - (3) 8310 SVOA, HPLC (Benzofluoranthene, Benzo(b)fluoranthene, Dibenz(a,h)anthracene)
 - (4) Semi-VOA - 8270A (App IX); Semi-VOA -- 8270A (App IX Add-On) (1,2-Diphenylhydrazine, 1,4-Dinitrobenzene, 1-Acetyl-2-thiourea, 2,5-Diaminotoluene, 2-Cylohexyl-4,6-dinitrophenol)
- Tie to activity report # B0V926

CHAIN OF POSSESSION				Sign/Print Names			
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Relinquished By: [Signature]	1400	Received By: [Signature]	2.28.00	Relinquished By: [Signature]	1400	Received By: [Signature]	2.28.00
Relinquished By: [Signature]	3-1-00 1030	Received By: [Signature]	3-1-00	Relinquished By: [Signature]	3-1-00 1030	Received By: [Signature]	3-1-00

LABORATORY SECTION	Received By	Disposal Method
FINAL SAMPLE DISPOSITION	Received By	Disposal Method

